## PROCEEDINGS

OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON

## THE LOUISIANA PUMA.

BY N. HOLLISTER.

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An attempt to identify the specimens of pumas in the collection of the United States National Museum has resulted in the discovery that the form found in Louisiana is very different from any yet described. This new form is represented in the museum collections by three specimens: two skulls from Mer Rouge, Morehouse Parish, collected by J. Fairie many years ago, and a skin and skull in the Biological Survey collection from Vidalia, Concordia Parish. The Louisiana puma is much more closely related to the puma of Florida than to the northern form or to Felis oregonensis azteca. It is readily separable from both the first and the last species by very marked color differences. The museum is fortunate in possessing two skulls each of Felis couguar from New York and Felis coryi from Florida, as well as good series of the western species. The pelage of the Florida puma has been carefully described by Mr. Chas. B. Cory, \* by Mr. Outram Bangs, † and by Dr. C. Hart Merriam, ‡ and Mr. Bangs has proved that it varies little in color with the season. From the records of the occurrence of the puma in the Southern States collected and published by Dr. F. W. True § it seems certain that the distribution between Florida and Louisiana was at one time continuous. As so little is known of the animal formerly inhabiting that region, however, and as the Louisiana puma differs so greatly from the Florida animal in color it seems best to regard it at present as a distinct species.

<sup>\*</sup> Hunting and Fishing in Florida, p. 109, 1896.

<sup>†</sup> Proc. Biol. Soc. Washington, XIII, pp. 15-17, 1899.

<sup>‡</sup> Proc. Washington Acad. Sci., III, pp. 583-585, 1901.

<sup>§</sup> Report U. S. Nat. Mus., 1888-'89, pp. 591-608, 1891.

## Felis arundivaga sp. nov.

Type from 12 miles southwest of Vidalia, Concordia Parish, Louisiana. No. 137,122, U. S. National Museum (Biological Survey Collection), skin and skull of ♂, adult (occipito-sphenoid suture entirely closed); collected June 17, 1905, by B. V. Lilly.

General characters.—A large puma of the Felis coryi type but lacking the bright ferruginous color; skull much larger than in Felis conguar, with the very broad nasals and highly developed saggital crest of F. coryi. Differs externally from Felis o. azteca in its darker coloration and very pronounced caudal stripe.

Color of type.—Upperparts, including outer sides of limbs, grayish fawn color with a decided cast of ecru drab, especially on flanks and legs; nape, withers, and an indefinite stripe down back to rump brighter, pale rufous; the entire upperparts finely mixed with dusky, the darker color of the hair tips. Face from crown to nose darker, blackish, with clear black spot each side of nose; a white streak over eye; ears blackish outside, with edge of gray and lining of white hairs. Lips and throat almost pure white, shading through creamy white to fulvous on breast. Insides of legs grayish, mixed brown and white hairs; fur of foot pads dark brown; feet like legs and flanks. Tail much darker than back with a sharply defined stripe of dark brown along the entire length of upper surface from rump to the short black tip.

Skull and teeth.—Skull large, massive, with the large, broad nasals and high saggital crest as in *F. coryi*; but with larger audital bulla. Much larger than the skulls of *F. conguar*, with well developed crest and much larger nasals; bullae much larger; opening of anterior nares very much larger; teeth, especially the second and third upper premolars, larger.

Measurements.—Skin of type: Total length, 2100 mm.; tail, 735 (measurements from tanned skin). Skulls of type and an adult male, very slightly younger, from Mer Rouge, Louisiana; the latter in parentheses: Condylobasal length, 193.5 (192); basal length, 180 (178); zygomatic breadth, 149 (—); palatal length, 87 (88); postpalatal length, 95.5 (97); least interorbital breadth, 43.5 (46); greatest length of nasals, 63 (60); greatest breadth of nasals, 36.3 (35.4); length of upper premolar row, 46.1 (46); length of audital bulla, 36 (37); length of lower molar-premolar series, 45.7 (46).

Remarks.—The rich ferruginous or intense rusty red back and other color characters of Felis coryi, and the pale uniformly colored back and tail of Felis oregonensis azteca, are enough to distinguish readily the Florida and Texas forms from the Louisiana puma.

Pumas are still fairly common in the wilder parts of the cane brake region of eastern Louisiana. In the early spring of 1904 while Mr. Waldo E. Forbes of Boston, Mr. B. V. Lilly of Louisiana, and I were hunting in the Bear Lake Cane we heard pumas calling in the forests at night, and several times succeeded in starting the animals with the hounds, but they were invariably too fast for our slow bear dogs and always quickly left

them in the distance. The following notes are taken from my field notebook of this trip:

February 23 (1904). Heard panthers crying about nine o'clock last night. There were probably two of them as the calls were sounded at short intervals, some times only about a minute apart, and one seemed a little farther away. The animals were evidently moving along to the north. The cry is a long drawn out, shrill trill, weird and startling. It commences low on the scale, gradually ascends, increasing in volume, and then lowers at the end. Forbes and Lilly put the hounds after them early this morning, but without success. Heard panther again in evening. February 24. Made a drive for the panther again this morning but did not run him hard enough to tree. February 26. Heard panthers to-night on both sides of Bear Lake. February 27. Crossed the lake early this morning and made a drive for the panther but the dogs seemed to lose trail at lake. Lilly says that panthers take readily to water and he thinks this one crossed to our side before morning. Made a drive on our side and soon started a panther in the cane. The animal promptly outdistanced the dogs after badly slitting an ear for one of them. February 28. Heard the panther's trilling wail across the lake to-night. We went out in the boat and silently paddled quite near him in an effort to "shine" his eyes, but failed to get a shot.

I believe the pumas call more in the early spring than at any other season, and we were probably very fortunate in the time of our visit to the cane, as the experience was one of very great interest. Mr. Lilly's efforts to obtain a good specimen for the Biological Survey resulted in the capture of the type the following year.